## Reasoning and Problem Solving Imperial Units

## Developing

1a. Syrup because they weigh 10kg, whereas the others weigh 5 kg .
2a. Various answers, for example: $2,399 \mathrm{ml}$, $2,939 \mathrm{ml}, 2,993 \mathrm{ml}, 3,299 \mathrm{ml}, 3,929 \mathrm{ml}$
3a. Yes. $10 \mathrm{~cm} \times 26=260 \mathrm{~cm}$ and that is enough for 100 inches

## Expected

4a. Sugar because it weighs 9.9 lbs , whereas the others weigh 16.5 lbs .
5a. Various answers, for example: $1,258 \mathrm{ml}$, $1,285 \mathrm{ml}, 1,528 \mathrm{ml}, 1,582 \mathrm{ml}$
6a. No, Michelle is not correct. 6 inches = $15.24 \mathrm{~cm} .15 .24 \times 12=182.88 \mathrm{~cm}$. Michelle will need 14 lengths of bamboo.

## Greater Depth

7a. Two bags of flour are the odd ones out because they weigh 7.26 lbs , whereas the others weigh 6.6 lbs .
8a. Various answers, for example: $1,542 \mathrm{ml}$, $1,524 \mathrm{ml}, 1,425 \mathrm{ml}, 1,452 \mathrm{ml}$
9 a . No, Justin is not correct. 50 inches $=$ 127 cm , and $5 \times 127 \mathrm{~cm}=635 \mathrm{~cm}$. She would only be able to wrap 4 presents.

## Reasoning and Problem Solving Imperial Units

## Developing

1b. Biscuits because they weigh 4lbs, whereas the others weigh 4.41bs.
2b. Various answers, for example: $1,278 \mathrm{ml}$, $1,287 \mathrm{ml}, 1,728 \mathrm{ml}, 1,782 \mathrm{ml}, 1,827 \mathrm{ml}$, $2,178 \mathrm{ml}, 2,187 \mathrm{ml}$
3b. No, Hafsah is not correct. 10 inches = 25.4 cm , so $4 \times 25.4 \mathrm{~cm}=101.6 \mathrm{~cm}$. Hafsah will only get 3 from each length.

## Expected

4b. Syrup because it weighs 2.5 kg , whereas the others weigh 2 kg
5b. Various answers for example: 2,019ml, 2,091ml, 2,109ml
6b. No, Lacey is not correct. Cameron needs 30 inches which is 76.2 cm , so 70 cm of fabric is not enough.

## Greater Depth

7b. Sugar because it weighs 5.4 lbs , whereas the others weigh 2 kg .
8b. Various answers, for example: $1,256 \mathrm{ml}$, $1,265 \mathrm{ml}, 1,526 \mathrm{ml}, 1,562 \mathrm{ml}$
9b. No, Xin is not correct. 40 inches $=$ 101.6 cm , so 3 planks would only give her 304.8 cm and she needs 350 cm . Marsha will need to buy 4 planks.

